

AMENDMENTS TO THE CLAIMS:

Please replace all prior listings of claims with that which appears below, in which Claims 1-35 have been cancelled, and Claims 37-48 have been introduced in their stead to read as follows:

Claims 1-35. (Cancelled).

36. (New) A thermosetting resin composition for adhering materials with dissimilar coefficients of thermal expansion comprising:

- a) a benzoxazine compound in liquid form,
- b) thermoset compounds including epoxy, cyanate ester, maleimide, acrylate, methacrylate, vinyl ether, styrenic, vinyl ester, propargyl ether, diallylamine, aromatic acetylene, benzocyclobutene, thiolenes, maleate, oxazoline, and itaconate,
- c) optionally, one or more anti-oxidants, bleed control agents, fillers, diluents, coupling agents, adhesion promoters, flexibilizers, dyes and pigments, and
- d) a cure initiator.

37. (New) A method for enhancing adhesive strength of a thermosetting resin composition between materials with dissimilar coefficients of thermal expansion, said method comprising the step of:

incorporating an effective amount of a benzoxazoline compound in liquid form into a composition comprising thermoset compounds including epoxy, cyanate ester, maleimide, acrylate, methacrylate, vinyl ether, styrenic, vinyl ester, propargyl ether, diallylamide, aromatic acetylene, benzocyclobutene, thiolenes, maleate, oxazoline, and itaconate; optionally, one or more anti-oxidants, bleed control agents, fillers, diluents, coupling agents, adheson promoters, flexibilizers, dyes and pigments, and a cure initiator.

38. (New) A method according to Claim 37, wherein one of the materials with dissimilar coefficients of thermal expansion has a metallic surface to which the thermosetting resin composition is adhered.

39. (New) A method according to claim 38, wherein said metallic surface is copper.

40. (New) A method for adhesively attaching a first substrate to a second substrate, said method comprising the steps of

providing the first substrate,  
providing the second substrate,

providing a thermosetting resin composition according to claim 37 positioned between said first and second substrates and curing the composition therebetween.

41. (New) A method according to claim 40, wherein said first substrate is a semiconductor die and said second substrate is circuit board.

42. (New) A method according to claim 40, wherein said first substrate is a semiconductor die and said second substrate has a metallic surface, which is a lead frame.

43. (New) A method according to claim 42, wherein said lead frame is a copper lead frame.

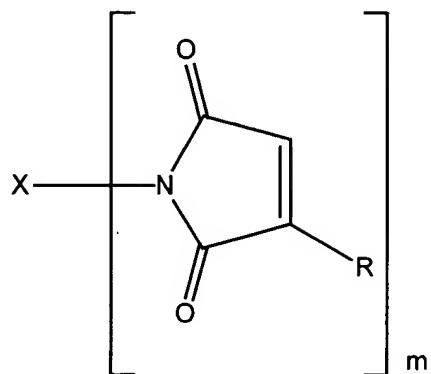
44. (New) A composition according to claim 36, wherein said maleimide is in liquid form.

45. (New) A composition according to claim 36, wherein said filler is conductive.

46. (New) A composition according to claim 36, wherein said filler is electrically conductive.

47. (New) A composition according to claim 36, wherein said filler is thermally conductive.

48. (New) A composition according to claim 36, wherein said maleimide has the structure:



wherein:

m is 1-3,

each R is independently hydrogen or lower alkyl,

and

X is a saturated straight chain alkyl, alkylene,  
or alkylene oxide, or branched chain alkyl, alkylene or alkylene  
oxide, optionally containing saturated cyclic moieties as  
substituents on said alkyl, alkylene or alkylene oxide chain or  
as part of the backbone of the alkyl, alkylene or alkylene oxide  
chain.